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Bailu Si; Pawelzik, K.; Herrmann, J.M.;
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22-26 Aug. 2004 Page(s):930 - 935
[AbstractPlus](#) | Full Text: [PDF](#)(1096 KB) IEEE CNF
[Rights and Permissions](#)
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Liehr, S.; Pawelzik, K.; Kohlmorgen, J.; Lemm, S.; Muller, K.R.;
[Neural Networks for Signal Processing IX, 1999. Proceedings of the 1999 IEEE](#)
[Processing Society Workshop](#)
23-25 Aug. 1999 Page(s):195 - 204
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[AbstractPlus](#) | Full Text: [PDF](#)(468 KB) IEEE CNF
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Kohlmorgen, J.; Muller, K.-R.; Pawelzik, K.;
[Neural Networks for Signal Processing \[1997\] VII. Proceedings of the 1997 IEEE](#)
24-26 Sept. 1997 Page(s):326 - 335
Digital Object Identifier 10.1109/NNSP.1997.622413
[AbstractPlus](#) | Full Text: [PDF](#)(544 KB) IEEE CNF
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- ☐ 5. **Self-organization of predictive representations**
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[Artificial Neural Networks, 1999. ICANN 99. Ninth International Conference on](#)
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☐ **6. Fast change point detection in switching dynamics using a hidden Markov prediction experts**

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Asymptotic statistical theory of overtraining and cross-validation

Amari, S. Murata, N. Muller, K.-R. Finke, M. Yang, H.H.

RIKEN, Inst. of Phys. & Chem. Res., Saitama, Japan;

This paper appears in: [Neural Networks, IEEE Transactions on](#)

Publication Date: Sept. 1997

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On page(s): 985 - 996

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Abstract

A statistical theory for overtraining is proposed. The analysis treats general realizable stochastic networks, trained with Kullback-Leibler divergence in the asymptotic case of a large number of examples. It is shown that the asymptotic gain in the generalization error is small if we permit even if we have access to the optimal stopping time. Based on the cross-validation stopping ratio the examples should be divided into training and cross-validation sets in order to obtain performance. Although cross-validated early stopping is useless in the asymptotic region, the generalization error in the nonasymptotic region. Our large scale simulations done in agreement with our analytical findings

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Author Keywords

Not Available

References

- 1 S. Amari, "Theory of adaptive pattern classifiers," *IEEE Trans. Electron. Comput.*, vol. 14, pp. 1049-1067, 1967.
- 2 S. Amari, "A universal theorem on learning curves," *Neural Networks*, vol. 6, pp. 161-176, 1993. [[CrossRef](#)]
- 3 S. Amari and N. Murata, "Statistical theory of learning curves under entropic loss criterion," *Comput. Intell.*, vol. 5, pp. 140-153, 1993.
- 4 S. Amari, N. Murata, K.-R. Muller, M. Finke, and H. Yang, "Statistical theory of overtraining and cross-validation effective?," *NIPS'95: Advances in Neural Information Processing Systems*, C. Mozer, and M. E. Hasselmo, Ed. Cambridge, MA: MIT Press, 1996.
- 5 H. Akaike, "A new look at statistical model identification," *IEEE Trans. Automat. Contr.*, vol. 39, pp. 716-723, 1974.

[\[CrossRef\]](#)

- 6 D. Barber, D. Saad, and P. Sollich, "Test error fluctuations in finite linear perceptrons, vol. 7, pp. 809-821, 1995.
- 7 D. Barber, D. Saad, and P. Sollich, "Finite-size effects and optimal test size in linear perceptrons, vol. 28, pp. 1325-1334, 1995.
- 8 N. Barkai, H. S. Seung, and H. Sompolinsky, "On-line learning of dichotomies," *Advances in Neural Information Processing Systems, NIPS 7*, G. Tesauro, D. S. Touretzky, and T. K. Lee Eds., MIT Press, 1995.
- 9 C. M. Bishop, *Regularization and complexity control in feedforward networks*: Aston University Report NCRC/95/022, 1995.
- 10 S. Bojars, W. Kinzel, and M. Oppner, "Generalization ability of perceptrons with continuous inputs," *Phys. Rev. E*, vol. E47, pp. 1384-1391, 1993.
- 11 S. Bojars, W. Kinzel, and M. Oppner, "Avoiding overfitting by finite temperature learning," *Proc. Int. Conf. Artificial Neural Networks ICANN'95 Paris*, pp. 111-116, 1995.
- 12 B. Efron and R. Tibshirani, *An Introduction to the Bootstrap* London: Chapman and Hall, 1993.
- 13 M. Finke and K.-R. Müller, "Estimating a posteriori probabilities using stochastic networks," *1993 Connectionist Models Summer School*, M. Mozer, P. Smolensky, D. S. Touretzky, and S. Weigend, Eds., Hillsdale, NJ: Lawrence Erlbaum, pp. 324, 1994.
- 14 I. Guyon, *A scaling law for the validation-set training-set ratio*, preprint, 1996, to be published.
- 15 M. H. Hassoun, *Fundamentals of Artificial Neural Networks* Cambridge, MA: MIT Press, 1995.
- 16 R. Hecht-Nielsen, *Neurocomputing* Reading, MA: Addison-Wesley, 1989.
- 17 T. Heskes and B. Kappen, *Phys. Rev. E*, Learning process in neural networks, vol. A44, pp. 1000-1004, 1991.
- 18 M. Kearns, "A bound on the error of cross validation using the approximation and estimation consequences for the training-test split," *NIPS '95: Advances in Neural Information Processing Systems 8*, D. S. Touretzky, M. C. Mozer, and M. E. Hasselmo, Eds., Cambridge, MA: MIT Press, 1996.
- 19 A. Krogh and J. Hertz, "Generalization in a linear perceptron in the presence of noise," *Phys. Rev. E*, pp. 1135-1147, 1992.
- 20 J. E. Moody, "The effective number of parameters: An analysis of generalization and nonlinear learning systems," *NIPS 4: Advances in Neural Information Processing Systems 4*, J. Hanson, and R. P. Lippmann, Eds., San Mateo, CA: Morgan Kaufmann, 1992.
- 21 N. Murata, S. Yoshizawa, and S. Amari, et al., "A criterion for determining the number of units in an artificial neural-network model," *Artificial Neural Networks*, T. Kohonen, Ed., Amsterdam: Elsevier, pp. 9-14, 1991.
- 22 N. Murata, S. Yoshizawa, and S. Amari, et al., "Learning curves, model selection and networks," *NIPS 5: Advances in Neural Information Processing Systems 5*, S. J. Hanson, Ed., San Mateo, CA: Morgan Kaufmann, 1993.
- 23 N. Murata, S. Yoshizawa, and S. Amari, "Network information criterion—Determining units for an artificial neural-network model," *IEEE Trans. Neural Networks*, vol. 5, pp. 415-426, 1994.
[Abstract](#) | [Full Text: PDF \(612KB\)](#)
- 24 K.-R. Müller, M. Finke, N. Murata, K. Schulten, and S. Amari, "A numerical study on the generalization of stochastic multilayer feedforward networks," *Univ. Tokyo, Tech. Rep. METR 03-95*, 1995.
- 25 T. Poggio and F. Girosi, "Regularization algorithms for learning that are equivalent to cross-validation," *Science*, vol. 247, pp. 978-982, 1990.
- 26 J. Rissanen, "Stochastic complexity and modeling," *Ann. Statist.*, vol. 14, pp. 1080-1109, 1986.
- 27 D. Rumelhart, G. E. Hinton, and R. J. Williams, "Learning internal representations by distributed processing: Explorations in the microstructure of cognition, vol. 1," Cambridge, MA: MIT Press, 1986.
- 28 D. Saad and S. A. Solla, "On-line learning in soft committee machines," *Phys. Rev. E*, On-line learning in multilayer neural networks, vol. 54, pp. 4225-4243, 1996.

- 29 J. Sjöberg and L. Ljung, *Overtraining, regularization and searching for minimum with networks*, Sweden: Linköping Univ., Tech. Rep. LITH-ISY-R-1567, 1994.
- 30 C. Wang, S. S. Venkatesh, and J. S. Judd, *Optimal stopping and effective machine c* revised and extended version of NIPS vol. 6, pp. 303–310, 1995, 1994, to be publish
- 31 V. Vapnik, *Estimation of Dependences Based on Empirical Data*, New York: Springer
- 32 V. Vapnik, *The Nature of Statistical Learning Theory*, New York: Springer-Verlag, 1995

Citing Documents

- 1 FPE-based criteria to dimension feedforward neural topologies, Alippi, C.
Circuits and Systems I: Fundamental Theory and Applications, IEEE Transactions on Systems I: Regular Papers, IEEE Transactions on
On page(s): 962-973, Volume: 46, Issue: 8, Aug 1999
[Abstract](#) | [Full Text: PDF](#) (264)
- 2 K-winner machines for pattern classification, Ridella, S.; Rovetta, S.; Zunino, R.
Neural Networks, IEEE Transactions on
On page(s): 371-385, Volume: 12, Issue: 2, Mar 2001
[Abstract](#) | [Full Text: PDF](#) (472)
- 3 Deterministic nonmonotone strategies for effective training of multilayer perceptrons, Magoulas, G.D.; Vrahatis, M.N.
Neural Networks, IEEE Transactions on
On page(s): 1268- 1284, Volume: 13, Issue: 6, Nov 2002
[Abstract](#) | [Full Text: PDF](#) (1030)
- 4 A model selection algorithm for a posteriori probability estimation with neural network Sueiro, J.
Neural Networks, IEEE Transactions on
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Scholkopf, B.; Mika, S.; Burges, C.J.C.; Knirsch, P.; Muller, K.-R.; Ratsch, G.;
[Neural Networks, IEEE Transactions on](#)
Volume 10, Issue 5, Sept. 1999 Page(s):1000 - 1017
Digital Object Identifier 10.1109/72.788641
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(1216 KB) IEEE JNL
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- ☐ 3. **Artifact reduction in magnetoneurography based on time-delayed second correlations**
Ziehe, A.; Muller, K.-R.; Nolte, G.; Mackert, B.-M.; Curio, G.;
[Biomedical Engineering, IEEE Transactions on](#)
Volume 47, Issue 1, Jan. 2000 Page(s):75 - 87
Digital Object Identifier 10.1109/10.817622
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Wubbel, G.; Ziehe, A.; Mackert, B.-M.; Muller, K.-R.; Trahms, L.; Curio, C.;
[Biomedical Engineering, IEEE Transactions on](#)
Volume 47, Issue 5, May 2000 Page(s):594 - 599
Digital Object Identifier 10.1109/10.841331
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(108 KB) IEEE JNL
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- ☐ 5. **An Introduction to kernel-based learning algorithms**
Muller, K.-R.; Mika, S.; Ratsch, G.; Tsuda, K.; Scholkopf, B.;
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Meinecke, F.; Ziehe, A.; Kawanabe, M.; Muller, K.-R.;
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Volume 49, Issue 12, Part 2, Dec. 2002 Page(s):1514 - 1525
Digital Object Identifier 10.1109/TBME.2002.805480
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- ☐ **7. Constructing boosting algorithms from SVMs: an application to one-class classification**
Ratsch, G.; Mika, S.; Scholkopf, B.; Muller, K.-R.;
[Pattern Analysis and Machine Intelligence, IEEE Transactions on](#)
Volume 24, Issue 9, Sept. 2002 Page(s):1184 - 1199
Digital Object Identifier 10.1109/TPAMI.2002.1033211
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Sajda, P.; Gerson, A.; Muller, K.-R.; Blankertz, B.; Parra, L.;
[Neural Systems and Rehabilitation Engineering, IEEE Transactions on \[see also Rehabilitation Engineering\]](#)
Volume 11, Issue 2, June 2003 Page(s):184 - 185
Digital Object Identifier 10.1109/TNSRE.2003.814453
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(195 KB\)](#) [IEEE JNL](#)
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Muller, K.-R.; Anderson, C.W.; Birch, G.E.;
[Neural Systems and Rehabilitation Engineering, IEEE Transactions on \[see also Rehabilitation Engineering\]](#)
Volume 11, Issue 2, June 2003 Page(s):165 - 169
Digital Object Identifier 10.1109/TNSRE.2003.814484
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(330 KB\)](#) [IEEE JNL](#)
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- ☐ **10. Boosting bit rates and error detection for the classification of fast-paced commands based on single-trial EEG analysis**
Blankertz, B.; Dornhege, G.; Schafer, C.; Krepki, R.; Kohlmorgen, J.; Muller, K.-R.; V. Losch, F.; Curio, G.;
[Neural Systems and Rehabilitation Engineering, IEEE Transactions on \[see also Rehabilitation Engineering\]](#)
Volume 11, Issue 2, June 2003 Page(s):127 - 131
Digital Object Identifier 10.1109/TNSRE.2003.814456
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(518 KB\)](#) [IEEE JNL](#)
[Rights and Permissions](#)

- ☐ **11. Constructing descriptive and discriminative nonlinear features: Rayleigh kernel feature spaces**
Mika, S.; Ratsch, G.; Weston, J.; Scholkopf, B.; Smola, A.; Muller, K.-R.;
[Pattern Analysis and Machine Intelligence, IEEE Transactions on](#)
Volume 25, Issue 5, May 2003 Page(s):623 - 628
Digital Object Identifier 10.1109/TPAMI.2003.1195996
[AbstractPlus](#) | [References](#) | Full Text: [PDF\(362 KB\)](#) [IEEE JNL](#)
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- ☐ **12. The BCI competition 2003: progress and perspectives in detection and discrimination of EEG single trials**
Blankertz, B.; Muller, K.-R.; Curio, G.; Vaughan, T.M.; Schalk, G.; Wolpaw, J.F.; Neuper, C.; Pfurtscheller, G.; Hinterberger, T.; Schroder, M.; Birbaumer, N.;
[Biomedical Engineering, IEEE Transactions on](#)
Volume 51, Issue 6, June 2004 Page(s):1044 - 1051
Digital Object Identifier 10.1109/TBME.2004.826692
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- ☐ **13. Boosting bit rates in noninvasive EEG single-trial classifications by feature selection and multiclass paradigms**
Dornhege, G.; Blankertz, B.; Curio, G.; Muller, K.-R.;
[Biomedical Engineering, IEEE Transactions on](#)
Volume 51, Issue 6, June 2004 Page(s):993 - 1002
Digital Object Identifier 10.1109/TBME.2004.827088
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- ☐ **14. Spatio-Spectral Filters for Improving the Classification of Single Trial EEG**
Lemm, S.; Blankertz, B.; Curio, G.; Muller, K.-R.;
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Krauledat, M.; Dornhege, G.; Blankertz, B.; Losch, F.; Curio, G.; Muller, K.-R.;
[Engineering in Medicine and Biology Society, 2004. EMBC 2004. Conference. Annual International Conference of the](#)
Volume 2, 2004 Page(s):4511 - 4515 Vol.6
Digital Object Identifier 10.1109/IEMBS.2004.1404253
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- ☐ **16. A consistency-based model selection for one-class classification**
Tax, D.M.J.; Muller, K.-R.;
[Pattern Recognition, 2004. ICPR 2004. Proceedings of the 17th International Conference on](#)
Volume 3, 23-26 Aug. 2004 Page(s):363 - 366 Vol.3
Digital Object Identifier 10.1109/ICPR.2004.1334542
[AbstractPlus](#) | Full Text: [PDF](#)(303 KB) [IEEE CNF](#)
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- ☐ **17. Experimental analysis of support vector machines with different kernels on intrusive monitoring data**
Onoda, T.; Murata, H.; Ratsch, G.; Muller, K.-R.;
[Neural Networks, 2002. IJCNN '02. Proceedings of the 2002 International Joint Conference on](#)
Volume 3, 12-17 May 2002 Page(s):2186 - 2191
Digital Object Identifier 10.1109/IJCNN.2002.1007480
[AbstractPlus](#) | Full Text: [PDF](#)(750 KB) [IEEE CNF](#)
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- ☐ **18. Decomposition algorithms for analysing brain signals**
Muller, K.-R.; Kohlmorgen, J.; Ziehe, A.; Blankertz, B.;
[Adaptive Systems for Signal Processing, Communications, and Control Symposium \(ASPPCC\), The IEEE 2000](#)

1-4 Oct. 2000 Page(s):105 - 110
 Digital Object Identifier 10.1109/ASSPCC.2000.882455
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- ☐ **19. Analysis of nonstationary time series by mixtures of self-organizing pred**
 Kohlmorgen, J.; Lemm, S.; Ratsch, G.; Muller, K.-R.;
[Neural Networks for Signal Processing X, 2000. Proceedings of the 2000 IEEE Processing Society Workshop](#)
 Volume 1, 11-13 Dec. 2000 Page(s):85 - 94 vol.1
 Digital Object Identifier 10.1109/NNSP.2000.889365
[AbstractPlus](#) | Full Text: [PDF\(480 KB\)](#) [IEEE CNF](#)
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- ☐ **20. Fisher discriminant analysis with kernels**
 Mika, S.; Ratsch, G.; Weston, J.; Scholkopf, B.; Mullers, K.R.;
[Neural Networks for Signal Processing IX, 1999. Proceedings of the 1999 IEEE Processing Society Workshop](#)
 23-25 Aug. 1999 Page(s):41 - 48
 Digital Object Identifier 10.1109/NNSP.1999.788121
[AbstractPlus](#) | Full Text: [PDF\(464 KB\)](#) [IEEE CNF](#)
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- ☐ **21. Hidden Markov mixtures of experts for prediction of non-stationary dyna**
 Liehr, S.; Pawelzik, K.; Kohlmorgen, J.; Lemm, S.; Muller, K.R.;
[Neural Networks for Signal Processing IX, 1999. Proceedings of the 1999 IEEE Processing Society Workshop](#)
 23-25 Aug. 1999 Page(s):195 - 204
 Digital Object Identifier 10.1109/NNSP.1999.788138
[AbstractPlus](#) | Full Text: [PDF\(468 KB\)](#) [IEEE CNF](#)
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- ☐ **22. Segmentation and identification of drifting dynamical systems**
 Kohlmorgen, J.; Muller, K.-R.; Pawelzik, K.;
[Neural Networks for Signal Processing \[1997\] VII. Proceedings of the 1997 IEEE](#)
 24-26 Sept. 1997 Page(s):326 - 335
 Digital Object Identifier 10.1109/NNSP.1997.622413
[AbstractPlus](#) | Full Text: [PDF\(544 KB\)](#) [IEEE CNF](#)
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- ☐ **23. Associative storage and retrieval of highly correlated natural pattern sets**
Hopfield networks
 Muller, K.-R.; Stiefvater, T.; Janben, H.;
[Neural Networks, 1993., IEEE International Conference on](#)
 28 March-1 April 1993 Page(s):889 - 894 vol.2
 Digital Object Identifier 10.1109/ICNN.1993.298675
[AbstractPlus](#) | Full Text: [PDF\(504 KB\)](#) [IEEE CNF](#)
[Rights and Permissions](#)
- ☐ **24. Classification on proximity data with LP-machines**
 Graepel, T.; Herbrich, R.; Scholkopf, B.; Smola, A.; Bartlett, P.; Muller, K.-R.; C
 Williamson, R.;
[Artificial Neural Networks, 1999. ICANN 99. Ninth International Conference on](#)
[470\)](#)
 Volume 1, 7-10 Sept. 1999 Page(s):304 - 309 vol.1
[AbstractPlus](#) | Full Text: [PDF\(408 KB\)](#) [IEEE CNF](#)
- ☐ **25. Fast change point detection in switching dynamics using a hidden Markc**
prediction experts

Kohlmorgen, J.; Lemm, S.; Muller, K.-R.; Liehr, S.; Pawelzik, K.;
Artificial Neural Networks, 1999. ICANN 99. Ninth International Conference on
470)

Volume 1, 7-10 Sept. 1999 Page(s):204 - 209 vol.1

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- ☐ 1. **Boosting bit rates and error detection for the classification of fast-paced commands based on single-trial EEG analysis**
Blankertz, B.; Dornhege, G.; Schafer, C.; Krepki, R.; Kohlmorgen, J.; Muller, K. V.; Losch, F.; Curio, G.;
[Neural Systems and Rehabilitation Engineering, IEEE Transactions on \[see also Rehabilitation Engineering\]](#)
Volume 11, Issue 2, June 2003 Page(s):127 - 131
Digital Object Identifier 10.1109/TNSRE.2003.814456
[AbstractPlus](#) | [References](#) | Full Text: [PDF](#)(518 KB) IEEE JNL
[Rights and Permissions](#)
- ☐ 2. **On optimal segmentation of sequential data**
Kohlmorgen, J.;
[Neural Networks for Signal Processing, 2003. NNSP'03. 2003 IEEE 13th Work](#)
17-19 Sept. 2003 Page(s):449 - 458
[AbstractPlus](#) | Full Text: [PDF](#)(446 KB) IEEE CNF
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- ☐ 3. **An on-line method for segmentation and identification of non-stationary t**
Kohlmorgen, J.; Lemm, S.;
[Neural Networks for Signal Processing XI, 2001. Proceedings of the 2001 IEEE](#)
[Processing Society Workshop](#)
10-12 Sept. 2001 Page(s):113 - 122
Digital Object Identifier 10.1109/NNSP.2001.943116
[AbstractPlus](#) | Full Text: [PDF](#)(920 KB) IEEE CNF
[Rights and Permissions](#)
- ☐ 4. **Decomposition algorithms for analysing brain signals**
Muller, K.-R.; Kohlmorgen, J.; Ziehe, A.; Blankertz, B.;
[Adaptive Systems for Signal Processing, Communications, and Control Sympo](#)
[SPCC. The IEEE 2000](#)
1-4 Oct. 2000 Page(s):105 - 110
Digital Object Identifier 10.1109/ASSPCC.2000.882455
[AbstractPlus](#) | Full Text: [PDF](#)(500 KB) IEEE CNF
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- ☐ 5. **Analysis of nonstationary time series by mixtures of self-organizing pred**
Kohlmorgen, J.; Lemm, S.; Ratsch, G.; Muller, K.-R.;

[Neural Networks for Signal Processing X, 2000. Proceedings of the 2000 IEEE Processing Society Workshop](#)
Volume 1, 11-13 Dec. 2000 Page(s):85 - 94 vol.1
Digital Object Identifier 10.1109/NNSP.2000.889365
[AbstractPlus](#) | Full Text: [PDF](#)(480 KB) [IEEE CNF](#)
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- ☐ **6. Hidden Markov mixtures of experts for prediction of non-stationary dynamical systems**
Liehr, S.; Pawelzik, K.; Kohlmorgen, J.; Lemm, S.; Muller, K.R.;
[Neural Networks for Signal Processing IX, 1999. Proceedings of the 1999 IEEE Processing Society Workshop](#)
23-25 Aug. 1999 Page(s):195 - 204
Digital Object Identifier 10.1109/NNSP.1999.788138
[AbstractPlus](#) | Full Text: [PDF](#)(468 KB) [IEEE CNF](#)
[Rights and Permissions](#)
- ☐ **7. Segmentation and Identification of drifting dynamical systems**
Kohlmorgen, J.; Muller, K.-R.; Pawelzik, K.;
[Neural Networks for Signal Processing \[1997\] VII. Proceedings of the 1997 IEEE Processing Society Workshop](#)
24-26 Sept. 1997 Page(s):326 - 335
Digital Object Identifier 10.1109/NNSP.1997.622413
[AbstractPlus](#) | Full Text: [PDF](#)(544 KB) [IEEE CNF](#)
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- ☐ **8. Fast change point detection in switching dynamics using a hidden Markov prediction experts**
Kohlmorgen, J.; Lemm, S.; Muller, K.-R.; Liehr, S.; Pawelzik, K.;
[Artificial Neural Networks, 1999. ICANN 99. Ninth International Conference on](#)
470)
Volume 1, 7-10 Sept. 1999 Page(s):204 - 209 vol.1
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